SCHOOL-TO-WORK PROGRESS MEASURES

A REPORT TO THE NATIONAL SCHOOL-TO-WORK OFFICE

For the period

January 1, 1996-June 30, 1996



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INTRODUCTION*

The School-to-Work Opportunities Act of 1994 (STWOA) seeks to establish comprehensive, statewide, school-to-work transition systems. Title IV, Section 402 of the Act requires that the Secretaries of Labor and Education develop a system of performance measures for assessing state and local school-to-work systems. The National School-to-Work Office has collaborated with states in designing a performance measures system (the Progress Measures) that is intended to yield information useful at the national level, and that also supports state and local school-to-work program improvement. Progress measures are one of a number of ways of understanding school-to-work initiatives. They provide some measure of systems growth and participation. The detail of school-to-work—depth and quality—are best explored through other vehicles such as the national evaluation and the many state and local evaluations that are being conducted across the 37 implementation states.

In particular, the Progress Measures System has four objectives:

- to respond to the mandate under Title IV, Section 402;¹
- to develop a common language around school-to-work,² so that data would be comparable and of high quality across partnerships and across states;
- to provide a framework within which states can design their own school-to-work data systems for program improvement purposes; and
- to build capacity among state and local school-to-work partners so that they will have the skills necessary to measure the success of their efforts.

Developing a set of Progress Measures involved a collaborative effort between states and the National School-to-Work Office.³ First-year Progress Measures during 1994–1995 focused on describing state-level system-building efforts.⁴ As the School-to-Work initiative expanded beyond the eight initial implementation states, a revised set of Progress Measures has focused on school, student, and employer participation and participation outcomes.

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¹See Appendix D for text of Section 402.

²To facilitate the development of a common language, the National School-to-Work Office, with the assistance of STW state coordinators, developed a glossary of terms, *School-to-Work Glossary of Terms*, to accompany the Progress Measures.

³Ten states were actively involved in developing the core Progress Measures: Kentucky, Washington, New Jersey, Massachusetts, Michigan, Colorado, Maine, Oregon, Pennsylvania, and Alaska.

⁴Karen Levesque, Elliott Medrich, Jennifer Giambattista, *School-to-Work Baseline Performance Measures: System Building in the Eight Implementation States* (Washington, D.C.: National School-to-Work Office, 1995).

Five types of Progress Measures have been designed:

- 1) Indicators of School-to-Work Systems Development
- 2) Indicators of School and Student Participation
- 3) Indicators of Employer Participation
- 4) Outcomes
- 5) Indicators of Sustainability—funding sources other than federal grants

Although federal, state, and local data needs do not overlap precisely, the Progress Measures provide an opportunity to understand how certain core processes of school-towork are occurring. Many states and local partnerships have augmented the core with indicators they deem useful for their unique program improvement purposes.

In addition to defining a core set of Progress Measures, the National Office has also focused attention on the capacity of local partnerships to collect the requested data. As discussed in Section IV of this report, for many partnerships there are substantial barriers to collecting Progress Measures. To address this issue, the National School-to-Work Office has sponsored several regional conferences in 1996–1997 and is planning further technical assistance activities during the 1997–1998 year.

This report covers the period January 1, 1996 to June 30, 1996 and describes the first four types of measures listed above. Information about sustainability will be included in the Progress Measures Survey for the period July 1, 1996–June 30, 1997.

This report is based on data from the Progress Measures Survey completed by 666 of the 787 local partnerships to which it was sent, an 85 percent response rate.⁵ All types of partnerships⁶ responded to the Progress Measures Survey; however, the majority of surveys were received from either planning or implementation partnerships funded by state school-to-work grants. Partnerships responding to the Progress Measures Survey were in various stages in the planning and/or implementation of their school-to-work systems and readers should understand that these data reflect the current status of an evolving school improvement, workforce development, and economic development initiative.

⁵Four states (Colorado, New Hampshire, North Carolina, and Ohio) opted not to send the Progress Measures Survey to partnerships that were planning their programs but had not yet implemented them. See Appendix A for a discussion of how the Progress Measures Surveys were disseminated.

⁶There are several types of direct, federally funded local partnership grants made specifically to Native Americans, urban and rural communities, and local partnerships in non-implementation states. For a description of each see Appendix C. The majority of partnerships are state-funded planning and implementation partnerships.

This report is based upon data from all responding partnerships, regardless of type of partnership or length of funding. Since all partnerships that responded to the Progress Measures Survey did not respond to every question, the number of partnerships (N) responding to each question is indicated whenever possible. Note that the changing N in part reflects the variable capacity of partnerships to report data.

Section I describes the growth of school-to-work systems. Section II reports on student participation in selected school-to-work activities at the elementary, middle, and secondary level. Section III reports on employer participation and Section IV discusses issues related to partnership capacity to report data, including student background characteristics⁷ and outcomes as required by the Act. Section V offers some specific conclusions.

⁷Student background data refers to the following information requested by the STWOA Section 402: gender, race/ethnicity, socioeconomic background, limited English-proficiency, academic talent, and disability.

Section I

INDICATORS OF SYSTEMS DEVELOPMENT

The School-to-Work Universe is Growing

As of June 30, 1996, there were 932⁸ partnerships reported in 41 states and Puerto Rico. In December 1995 there were 294 partnerships in 11 states. The number of partnerships has increased as more states have been given implementation grants and as existing implementation states awarded grants to additional partnerships within their states.

Local partnerships are geographic entities that can be defined in a variety of ways, including school district boundaries, JTPA service areas, or local labor market areas. The Progress Measures Survey asked local partnerships to report the number of schools and students in the area encompassed by their jurisdiction. The data do not indicate the number of students who are actively participating in school-to-work initiatives, but they do suggest the potential number of schools and students who could be served.

The 666 partnerships responding to the Progress Measures Survey reported nearly 28,000 schools and over 14 million students in school-to-work partnerships. In contrast, in December 1995 the 210 reporting partnerships covered 13,000 schools and 7.8 million students.

 $^{^8}$ This includes both direct federally funded, substate funded, and implementation partnerships. See Appendix B for a list by state.

The following table shows the total number of schools and students in partnerships in June 1996, by school level, in the partnerships responding to the Progress Measures Survey.

Table 1 Number of schools and students in local partnerships by school level, June 1996

	Number of Schools	Students
Elementary	16,685	7,016,309
Middle	5,561	2,858,227
Secondary	5,409	3,997,827
Other	686	515,480

Postsecondary Institutions Participating in School-to-Work Partnerships

The STWOA encourages partnerships to design systems which actively engage postsecondary institutions. The Progress Measures Survey requested data about participation in both two- and four-year postsecondary institutions.

Table 2
Percentage of local partnerships reporting participation of postsecondary institutions (including two-year, four-year, and private career schools) by number of institutions reported, June 1996

Number of Postsecondary Institutions Reported (including two-year, four-year, and private career schools)	Percentage of Local Partnerships
1	27
2	24
3	16
4 or more	30

Table 3
Percentage of local partnerships reporting participation of four-year postsecondary institutions by number of participating institutions reported, June 1996

Number of Four-Year Postsecondary Institutions Reported	Percentage of Local Partnerships
1	37
2	16
3	7
4 or more	9

These data do not describe the strength of the postsecondary linkages or their quality. Rather, they demonstrate that by and large, local partnerships are recognizing that postsecondary institutions have an important role to play in building the school-to-work system.

Section II

INDICATORS OF SCHOOL AND STUDENT PARTICIPATION

The STWOA requires that local partnership activities include three components: school-based learning, work-based learning, and connecting activities. The activities identified in the Progress Measures Survey are broadly defined to accommodate a variety of opportunities partnerships may offer in each of these three areas. Schools may offer and students may participate in more than one school-based activity, hence they may be counted as participating in more than one activity in the tables that follow.

This section describes participation in STW activities at the elementary, middle, and high school level across all partnerships that responded to the Progress Measures Survey. For a more in-depth discussion of the variation in level of participation in selected states, refer to the report *School and Student Participation in School-to-Work: The Range and Focus in Selected States.*¹⁰

Career Exploration at the Elementary and Middle School Level

Elementary and middle schools can introduce students to the world of work and build the foundation for high school activities around career choices. Elementary school activities are often designed to promote awareness of the many career opportunities from which students may one day choose. Middle school activities often help students explore career options and assess their own interests and abilities.

At the elementary and middle school level, data were collected at the school level only.

Elementary Schools

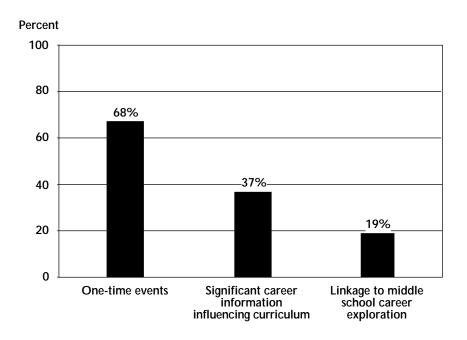
- 68 percent of elementary schools in reporting partnerships (N=511) provided onetime career-related events, such as classroom speakers, films, or visits to work sites.
- 37 percent of elementary schools in reporting partnerships (N=486) provided activities with significant career information influencing the delivery of curriculum such as project-based instruction.

⁹See Title I, Section 102–104 of the STWOA.

¹⁰Elliott Medrich and Jennifer Giambattista, School and Student Participation in School-to-Work: The Range and Focus in Selected States (Washington, D.C.: National School-to-Work Office), forthcoming.

• 19 percent of elementary schools in reporting partnerships (N=419) provided activities offering systematic linkage to middle school career exploration such as a career awareness program that begins in the elementary grades and continues in the middle grades.

Figure 1
Percentage of elementary schools in reporting partnerships providing school-to-work activities by type of activity, June 1996



Middle Schools

- 65 percent of middle schools in reporting local partnerships (N=494) provided opportunities for career self-exploration activities such as the use of computer databases, resource centers, and publications.
- 64 percent of middle schools in reporting local partnerships (N=508) provided facilitated career exploration such as counseling or testing.
- 38 percent of middle schools in reporting local partnerships (N=438) provided structured career exploration activities such as individualized learning plans linked to career pathways offered in high school.

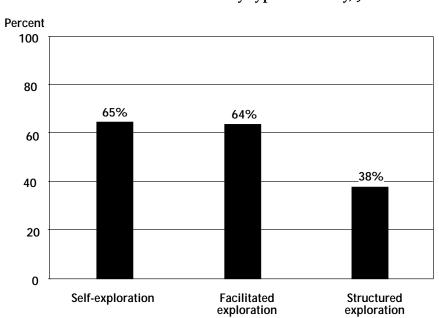


Figure 2
Percentage of middle schools in reporting partnerships providing school-to-work activities by type of activity, June 1996

School-to-Work Activities at the High School Level

At the high school level, data were collected on both school-based and work-based activities.

School-Based Activities

School-based school-to-work activities are intended to connect academic and work-related curriculum. Partnerships reported the number of schools offering school-to-work activities and the number of students participating in each activity. Figure 3 shows the percentage of secondary *schools* participating in selected school-based, school-to-work activities, while Figure 4 shows the percentage of *students* participating in these activities.

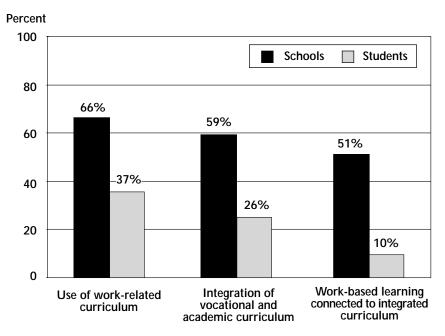
 66 percent of secondary schools in reporting local partnerships provided activities which use work-related curriculum, and 37 percent of secondary students in reporting local partnerships participated in those activities.¹¹

 $^{^{11}}$ 539 local partnerships reported data for secondary school participation; 449 local partnerships reported data for secondary student participation.

- 59 percent of secondary schools in reporting local partnerships provided activities which integrate academic and vocational curriculum, and 26 percent of secondary students in reporting local partnerships participated in those activities.¹²
- 51 percent of secondary schools in reporting local partnerships provided work-based learning experiences connected to integrated curriculum, and 10 percent of secondary students in reporting local partnerships participated in those activities.¹³

Figure 3

Percentage of secondary schools and students in reporting local partnerships participating in school-to-work activities by type of activity, June 1996



Work-Based Learning Activities

The Progress Measures Survey included questions about selected structured work-based learning experiences: job shadowing/mentoring, internships, and multi-year apprentice-ships. While not comprehensive, these represent some of the more recognizable STW activities. However, these activities are only a portion of potential work-based learning activities pursued by some local partnerships. Many time-honored activities with work-based dimensions such as service learning and Co-op were not examined. Therefore, the Progress Measures provide an intentionally selective focus on certain types of work-based learning.

¹²516 local partnerships reported data for secondary *school participation*; 418 local partnerships reported data for secondary *student* participation.

¹³524 local partnerships reported data for secondary *school participation*; 435 local partnerships reported data for secondary *student* participation.

¹⁴These will be measured beginning with the fall 1997 Progress Measures Survey.

Among the activities described in the Progress Measures Survey:

- 7 percent of students in reporting local partnerships (N=453) participated in job shadowing or mentoring activities.
- 4 percent of students in reporting local partnerships (N=467) participated in paid or unpaid internship positions.
- Less than one percent of students in reporting partnerships (N=372) participated in paid or unpaid apprenticeship activities.

While partnerships are attempting to develop these types of work-based learning opportunities for students, as noted in recent reports¹⁵ and confirmed by this survey, there is still considerable room for progress. This is an especially urgent issue as the Act envisions that all students will engage in some combination of work-based and school-based learning. At the secondary level, as described here, an enormous effort will be necessary to achieve this goal.

¹⁵National Governors' Association, *The Employer Connection: State Strategies for Building School-to-Work Partnerships* (Washington, D.C.: 1996). Greg A. Bazakas, *Employer Involvement in State School-to-Work System Building* (Washington, D.C.: Council of Chief State School Officers, 1996). See also M. Hershey et al., *Partners in Progress: Early Steps in Creating School-to-Work Systems* (Princeton, NJ: Mathematica Policy Research, April 1997).

Section III Indicators of Employer Participation in School-to-Work

Successful school-to-work systems need active employer involvement to connect school curriculum with workplace skills and to provide work-based learning opportunities for students. ¹⁶ Employer involvement in school-to-work can take many forms depending on the resources of the employer and the degree to which local partnerships are able to use those resources. For example, some employers may not have the staff to supervise and work closely with a student, but may instead be able to make presentations at school career fairs. In contrast, other employers may be able to provide extensive student internship opportunities under the direction of a company-supported staff member. The point is that local partnerships must be able to provide a variety of ways for employers to become involved in school-to-work. ¹⁷

From January through June 1996, more than 200,000 business establishments participated in school-to-work in the reporting school-to-work partnerships (N=531) in some capacity such as meeting with teachers to discuss curriculum, making presentations at career fairs, or offering work-based learning opportunities for students. *Not all of these* 200,000 business establishments offered work-based learning opportunities. Among those business establishments that were participating in local partnerships in some capacity, 86 percent were small business establishments (0–49 employees), 11 percent were medium-sized business establishments (50–499 employees), 2 percent were large business establishments (500 or more employees), and 1 percent were business establishments of unknown size.

¹⁶For further discussion of employer involvement in school-to-work programs see Tom Bailey, *Learning to Work: Employer Involvement in School-to-Work Transition Programs* (Washington, D.C.: The Brookings Institution, 1996). ¹⁷The National Employee Leadership Council (NELC) has developed an employee participation model for school-to-work. See NELC, *The Employee Participation Model: Connecting Learning and Earning* (Washington, D.C: 1996).

¹⁸If a business had more than one site involved in a partnership, each site was counted individually.

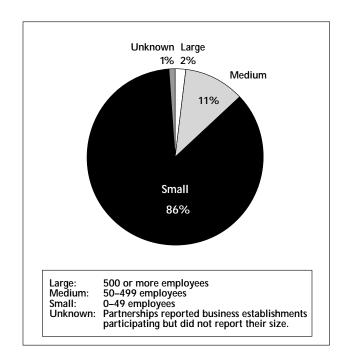


Figure 4
Size of business establishments participating in school-to-work activities, June 1996

There was a considerable range in the number of business establishments involved in partnerships (N=531).

- 17 percent of partnerships providing employer data reported that less than 10 business establishments were participating in their partnership.
- 31 percent of partnerships reporting employer data reported that 10–50 business establishments were participating in their partnership.
- 31 percent of partnerships providing employer data reported that more than 50 business establishments were participating in their partnership.

Employer Involvement in Work-Based Learning

One of the most important types of employer involvement in school-to-work involves serving as a work-based learning site for students. From January through June 1996 there were over 59,000 work-based learning sites for students. Sixty-two percent of these sites were provided by small business establishments, 29 percent by medium-sized business establishments, six percent by large businesses, and three percent by business establishments of unknown size.

Table 4
Business establishments participating in local partnerships, June 1996

	Small	Medium	Large	Unknown	Total
Number of businesses offering work-based learning positions (sites)	36,582	16,891	3,673	2,093	59,239
Number of work-based learning positions available (slots)	70,541	31,485	14,990	2,031	119,047

These sites generated 119,000 work-based learning positions for students. The number of work-based learning positions offered by a business varied by size. Small business establishments providing work-based learning opportunities offered on average 2.1 positions per business, medium-sized business establishments offered on average 2.4 positions per business, and large businesses offered on average 5.1 positions per business establishment.

Although, as shown above, small business establishments offered fewer positions per business than large employers, they did provide the majority of work-based learning positions. Fifty-nine percent of the work-based learning positions were with small business establishments, 26 percent were with medium-sized business establishments, 13 percent were with large business establishments, and two percent were with business establishments of unknown size.

Teacher Internships

As described by the *School-to-Work Glossary of Terms*, "teacher internships are work-site experiences of at least two weeks in duration. During this time, teachers may work at a particular job at the firm to learn specific skills, or rotate throughout the firm to learn all aspects of the industry in which they are employed. This may or may not include financial compensation."

Among reporting partnerships (N=470) a total of 5,800 teachers participated in School-to-Work internships at business establishments. Forty-seven percent of these internships were at small businesses, 35 percent at medium-sized businesses, and 22 percent at large businesses. The number of internships was in fact very small, suggesting that businesses are still an untapped training resource for building teacher capacity.

Section IV

CAPACITY TO REPORT DATA ON OUTCOMES

AND PARTICIPATION

The STWOA, Title IV, Section 402 requires that performance measurement data be collected for "participation in school-to-work opportunities programs by employers, schools, students, and school dropouts." Student participation data must include information on the "gender, race, ethnicity, socioeconomic background, limited-English-proficiency and disability of all participants and whether participants are academically talented students."

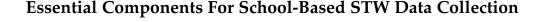
A number of factors affect how local partnerships address these data requirements and there are at least four substantial barriers to providing complete information: (1) the structure of the local partnership; (2) the nature of the existing data collection systems among the entities served by local partnership; (3) the extent to which employers and schools share data about students participating in work-based, school-to-work activities; and (4) the resources of the local partnership.

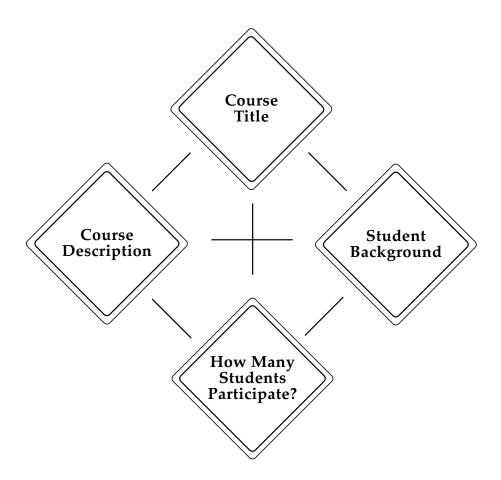
Structure:

Many local partnerships are "overlays" on a variety of different kinds of jurisdictions. For instance, a single partnership may encompass one or more school districts, or parts of several school districts and JTPA service delivery areas. As a result, even in the best of circumstances, collecting data may require coordinating many sources of information—and information from these different sources may or may not be readily available to the partnership. Furthermore, different entities within the local partnership jurisdiction may not collect the same data, or they may not collect data in the same way.

Existing Systems:

Even when partnerships are able to access data from all of the entities within their jurisdiction, the existing data system may not have the components needed for school-to-work reporting purposes. For example, school-based learning data would have to include 1) course titles; 2) course descriptions, including information on instructional practices related to school-to-work (e.g., does the course use an integrated curriculum); 3) the number of students who are taking those courses; and 4) student background characteristics. For school-to-work purposes, an effective management information system would link these four components.





Existing management information systems often do not enable partnerships to make all the necessary linkages. For example, there is often no record of the instructional practices associated with each course, making it difficult for a partnership to determine how many students were in courses which offered integrated curriculum. Furthermore, even if a course can be identified as having school-to-work instructional practices, it may be difficult to link that information to a student record in order to report the characteristics of students enrolled. Further, some partnerships are also concerned with issues of confidentiality, particularly at the K–12 level, and may discourage reporting certain student background characteristics at all, even if they are available.

Shared Data Between Employers and Schools:

While a student may be participating in a school-to-work activity at a place of business, neither the placement nor the substance of the activity may be recorded. Unless there is a

systematic sharing of data between employer and school, the partnership may not be able to get essential data about which students are engaged in what kinds of work-based learning activities.

Resources:

Given these factors, partnerships need substantial resources dedicated to data management in order to collect the required STW data. Partnerships may not have the staff or capability to design a system needed to accomplish these data collections. Under any circumstances it would be costly to do. Taken together, the general issue of data collection for progress measurement must be viewed as a lengthy capacity-building process that requires commitment, involvement, and resources from the federal, state, and local levels.

Recognizing these constraints, the Progress Measures Survey asked local partnerships for student background¹⁹ data for participants in certain work-based school-to-work activities (job shadowing, internships, and apprenticeships) and certain school-based activities (including classes using a work-related curriculum, classes integrating academic and occupational curriculum, and classes connecting work-based learning to an integrated curriculum). These data were requested for the secondary level only.

Some information seemed to be especially difficult for local partnerships to collect. For example, as shown in table 5 and table 6 on the following page, for both school-based learning and work-based learning, local partnerships were less likely to be able to report academic talent data and limited-English-proficiency than gender and/or student race/ethnicity.

¹⁹The background data requested was based upon Section 402 of the STWOA and included gender, race/ethnicity, socioeconomic status, disability, and limited-English-proficiency.

Table 5
Percentage of local partnerships that were able to report demographic data for at least one school-based school-to-work activity, June 1996

Characteristic	Percentage of partnerships across all states reporting data
Gender	63
Race/ethnicity	59
Socioeconomic status	46
Limited English proficient	36
Disability	46
Academically talented students	31

Table 6
Percentage of local partnerships that were able to report demographic data for at least one work-based school-to-work activity, June 1996

Characteristics	Percentage of partnerships across all states reporting data
Gender	57
Race/ethnicity	50
Socioeconomic status	36
Limited English proficient	25
Disability	34
Academically talented students	27

As seen in tables 5 and 6, there are differences in local partnership capacity to report background data for school-based activities compared with work-based activities. A greater percentage of partnerships reporting school-based activities were able to describe student characteristics for at least one school-based activity than were those partnerships reporting work-based activities. However, within school-based and work-based activities the capacity to report does not vary significantly from activity to activity. This next section outlines the capacity to report demographic data for each activity in the Progress Measures Survey.

School-Based Career Exposure

Classes Using Work-Related Curriculum

- Sixty-two percent of partnerships that reported offering courses using work-related curriculum provided data on at least one student background characteristic.
- Nineteen percent of partnerships that reported offering courses using work-related curriculum provided data on each of the six demographic variables.

Integration of Academics and Vocational Curriculum

- Fifty-eight percent of partnerships that reported integration of academic and vocational curriculum provided data on at least one of the student background characteristics.
- Twenty percent of partnerships that reported integration of academics and vocational curriculum provided data on each of the six demographic variables.

Work-Based Learning Connected to Integrated Curriculum

- Fifty-nine percent of partnerships that reported work-based learning activities connected to integrated curriculum provided data on at least one of the student background characteristics.
- Sixteen percent of local partnerships that reported work-based learning activities connected to integrated curriculum provided data on each of the six demographic variables.

Work-Based Learning

Job Shadowing and Mentoring

- Sixty-five percent of partnerships that reported students participating in job shadowing/mentoring provided data for at least one student background characteristic.
- Seventeen percent of partnerships that reported students participating in job shadowing/mentoring provided data for all six student background characteristics.

Internships

- Fifty-three percent of partnerships that reported students participating in internships provided data for at least one student background characteristic.
- Fourteen percent of local partnerships that reported students participating in internships provided data for all six student background characteristics.

Apprenticeships

- Forty-nine percent of partnerships that reported students participating in apprenticeships provided information on at least one demographic characteristic.
- Nine percent of partnerships that reported students participating in apprenticeships provided data on each of the six demographic variables.

Outcomes—Local Partnership Capacity to Report High School Completion and Postsecondary Transition for Progress Measures

Since school-to-work represents systemic reform, it is inevitably difficult to attribute certain kinds of outcomes specifically and uniquely to participation in the program components. It may take considerable time before enough students have had enough exposure to the local initiative to measure the relationship between school-to-work participation and anticipated outcomes.

Even so, the school-to-work legislation proposes that data be collected on a number of outcome variables. This section explores two of the specific objectives of school-to-work, and considers the data reporting issues associated with each.

While data availability issues were evident around these two outcome variables—high school graduation and postsecondary transition—a different problem was also identified: not all states and local partnerships define these outcomes in the same way. Therefore, it is

unlikely that identical populations are being counted in similar ways from partnership to partnership.²⁰ For instance, in the case of high school graduation, few states impose a standard definition on their school districts, so different populations, at different times of year, based on different aggregations, may be included in the equation. Further, since the geographic boundaries of the partnership may not be coterminous with any single school district boundary, it may be difficult to obtain these data on a partnership-wide basis. At best, only school-by-school data are available, and these data may or may not be collected in exactly the same way.

Completion

- Seventy-two percent of local partnerships were able to report high school completion for at least one of the high schools in their partnerships.
- In the partnerships which were able to report completion rates, completion data were reported for 84 percent of high schools in those partnerships; however, some partnerships reported school rates, and others reported district-wide rates.

Postsecondary Transition

- Sixty-four percent of local partnerships were able to report transition to postsecondary education for at least one of the high schools in their partnerships.
- In the partnerships which were able to report transition rates, transition data were reported for approximately 42 percent of high schools in those partnerships.

Summary

The capacity issues discussed above suggest there must be a substantial effort to develop information management systems at the local level if partnerships are to provide data as defined in the legislation. In particular, efforts need to consider how existing systems can be used to support school-to-work data collection. At present, few partnerships have systems that are capable of collecting detailed information about those participating in school-to-work activities.

Most local partnerships do not now have the capacity to report information about STW participation or outcomes as described in the legislation. A considerable local and state level development program would be required to achieve this goal.

²⁰Mark Gritz, Terry Johnson, and Jan Leonard, *State Systems of Performance Measures and Standards in Vocational Education, Final Report* (Seattle, WA: Batelle Memorial Institute, 1996).

Section V Conclusions

Beyond providing information required by the STWOA, progress measures are intended to highlight opportunities and challenges associated with achieving the school-to-work mandate. As the federal investment in school-to-work passes or approaches the halfway point in 27 states, it is appropriate to use progress measures to reflect on what must still be done to ensure success. An important conclusion of this report is that there is an essential need for commitment by the National Office and by state leadership to assure that the school-to-work foundation is bolstered and extended. This will require a strategic plan designed to build the capacity of local partnerships so that they can develop systems to scale, monitor their progress, and use data to make programmatic changes.

As indicators of systems' breadth, progress measures do not, and can not, substitute for detailed evaluation of the Act and its components. These measures offer a snapshot of school-to-work along dimensions that are recognized as crucial to accomplishing the goals of the Act. Progress measures do not describe the richness of the school-to-work system, nor do they reflect the variation inherent in a national system funded to encourage states and localities to design strategies around their own education, economic, and workforce development needs.

Getting to Scale

School, student, teacher, and employer elements of the STWOA are in evidence, but they are not yet solidly in place. School-to-work local partnerships are growing in number, but will have to direct attention toward expanding the depth and breadth of their alliances and services.

Students

At the high school level, whether with reference to school-based or work-based activities, school-to-work opportunities are not yet reaching a critical mass of students. At this point, only a minority of secondary students in reporting partnerships engage in school-based or work-based activities identified in the Progress Measures Survey.

Employers

A significant increase in the number of employers involved in school-to-work will be necessary in order to generate the number and types of work-based learning positions for students. Consider the following example.

At this time, there are approximately four million high school students in local partner-ships, and approximately 119,000 work-based learning positions. If, as an objective, during a six-month period there were to be work-based positions for 10 percent of these students, approximately 300,000 work-based learning positions would be needed.

What kind of strategy would be necessary to accomplish this kind of goal for work-based learning? Could large businesses contribute more positions to the work-based learning effort? The enormity of the challenge is underscored by two findings here: most of the employers offering work-based learning positions are small businesses, yet large businesses offer many more opportunities per establishment. This kind of analysis represents an excellent use of progress measures data, for they provide a basis for discussion and an invigoration of goal-oriented thinking.

Teachers

Teachers are a crucial element of the long range school-to-work strategy. As evidenced by the number of teacher internships, at present there are very few of these structured linkages between instructors and employers. Since it is clearly the case that changing the nature of instruction in schools is fundamental to achieving many of the goals for school-to-work, building opportunities for teachers deserves special attention in the future.

The Data Issue

As evidenced by data reported in Section IV of this report, few local partnerships are fully prepared to document their progress with detailed information about the schools, students, and employers participating in school-to-work activities. There is a serious question as to how local partnerships will be able to meet the data-related objectives of the Act. Few local partnership data systems are able to provide the detailed level of data described by the Act. Tracking the progress of schools, students, and employers engaged in school-to-work is currently a labor-intensive, tedious process. The links among employer and student and school data are minimal. Until the MIS issues associated with reporting school-to-work are addressed with energy and resources, this situation is not likely to improve. It should be noted that without this capability, the kind of detailed information that is necessary to manage a system designed to serve all students cannot be developed.

Based on findings here, building capacity to enhance the quality of future data collection for purposes of local program improvement after sunset of STWOA requires consideration at the national level and collectively among states and local partnerships.

APPENDIX A

Dissemination of the Progress Measures Survey

In June 1996 the National School-to-Work Office disseminated Progress Measures to state coordinators in school-to-work implementation states. In addition, the Survey was distributed directly to all federally funded partnerships. State coordinators were given the responsibility of distributing the Progress Measures Survey to their local partnerships. Most states sent the Progress Measures Survey to implementation partnerships as well as planning partnerships if they existed in their state. Four states (Colorado, New Hampshire, North Carolina, and Ohio) opted not to send the Progress Measures Survey to partnerships that were planning their programs but had not yet achieved implementation.

$\mathbf{A}_{\text{PPENDIX}} \mathbf{B}$

SCHOOL-TO-WORK LOCAL PARTNERSHIPS As of June 1996

State	Number of Partnerships
Alabama	1
Alaska	24
Arizona	16
California	10
Colorado	38
Connecticut	1
Florida	28
Hawaii	26
Idaho	1
Illinois	3
Indiana	16
Iowa	127
Kansas	1
Kentucky	22
Maine	24
Maryland	12
Massachusetts	42
Michigan	45
Minnesota	4
Missouri	1
Nebraska	14
New Hampshire	36
New Jersey	21
New York	56
North Carolina	60
New Mexico	2
Ohio	52
Oklahoma	3
Oregon	17
Puerto Rico	1
Pennsylvania	57
Rhode Island	1
South Carolina	1
South Dakota	1
Tennessee	1
Texas	6
Utah	10
Vermont	14
West Virginia	28
Washington	74
Wisconsin	32
Wyoming	2
Total	932

APPENDIX C

Types of Local Partnerships

Most local partnerships are federally funded through state school-to-work grants. In addition, there are three other grant mechanisms.

1. Local Partnership Grants

Local partnership grants enable communities with a sound planning and development base to begin implementation of school-to-work opportunities initiatives that will become part of statewide school-to-work opportunities systems. These partnerships can serve as practical models, informing state system-building efforts and serving as resources for other local partnerships.

As defined in the School-to-Work Opportunities Act, local partnerships include employers, representatives of local educational agencies and local postsecondary educational institutions including representatives of area vocational education schools, local educators, representatives, and students. Local partnership initiatives offer youth access to school-to-work opportunities initiatives and prepare them for first jobs in high-skill, high-wage careers and further education and training.

Local partnership grants are authorized under Title III of the School-to-Work Opportunities Act of 1994. Direct competitive grants are made to local partnerships in states that have not yet received an implementation grant or are in their first year of implementation. After states receive their implementation grants, they incorporate local partnership grantees into their second-year funding plan and the direct local partnership grant ends. As of year end 1996, 42 local partnership grants are funded by the federal government.

2. Urban/Rural Opportunities Grants

High poverty urban and rural areas face particular challenges in implementing school-to-work initiatives. These challenges may include few large private or public employers, high dropout rates, students who may be less aware of college opportunities than students in other areas, strong peer pressure that does not necessarily promote achievement among youth, pressure on youth from situations outside of school which may affect their school performance, schools with students of more diverse ethnic and racial backgrounds than schools in other areas, proportionately more out-of-school youth than in other areas, and uneven quality in educational and employment opportunities among high poverty area youth.

Urban/Rural Opportunities Grants (UROG) enable local partnerships in high poverty urban and rural areas to develop and implement School-to-Work Opportunities initiatives for youth who reside or attend school in these areas. These initiatives help youth in high poverty areas to prepare for high-skill, high-wage careers and further education and training. The initiatives include specific strategies to address the multiple needs of urban and rural in- and out-of-school youth, including human service needs.

UROG grants are authorized under Title III of the School-to-Work Opportunities Act of 1994. Ten percent of the Act's appropriation must be used for these grants. The grants provide up to five years' support for local partnerships in communities with poverty rates above 20 percent for youth under 22. These partnerships can serve as practical models, informing state system-building efforts and serving as resources for other urban or rural partnership. As of year end 1996, 52 grants have been awarded to partnerships in urban and rural communities across the United States.

3. Indian Program Grants

Partnerships serving Indian youth face particular challenges in implementing School-to-Work Opportunities initiatives. High unemployment and relatively few high-skill, high-wage employment opportunities often characterize the areas in which these partnerships are located. For this reason, these local partnerships may find it more difficult to secure employer participation, work-based learning opportunities, and career-track jobs for Indian youth who complete a school-to-work opportunities program. In addition, high dropout rates, unequal access to quality educational experiences and the lack of relevant information regarding career options are common in remote service areas where Indian youth live or study.

Indian Program Grants enable local partnerships to begin development or implementation of School-to-Work initiatives that serve Indian youth and involve schools funded under the Department of the Interior's Bureau of Indian Affairs (BIA). These initiatives offer alternative learning environments (i.e., tribal businesses, school-based enterprises and entrepreneurial training), creative approaches to academic and technical subjects and relevant and engaging school and work-based activities that encourage Indian youth to remain in school until completion and make a successful transition into high-skill, high-wage jobs and postsecondary education and training.

Indian Program Grants are authorized under Title II, Subtitle C of the School-to-Work Opportunities Act of 1994. The strategy for implementing these grants was developed collaboratively by staff from the National School-to-Work Office, representatives from the BIA, the Department of Labor's Division of Indian and Native American Programs, the Department of Education's Office of Indian Education Programs, and the National Advisory Council on Indian Education. Eighteen grants have been awarded thus far, totaling over \$1.8 million.

APPENDIX D

School-to-Work Opportunities Act of 1994 Title IV

SEC. 402. PERFORMANCE OUTCOMES AND EVALUATION.

- (a) **IN GENERAL**—The Secretaries, in collaboration with the States, shall by grant, contract, or otherwise, establish a system of performance measures for assessing State and local programs regarding—
- (1) progress in the development and implementation of State plans described in section 213(d) that include the basic program components described in sections 102, 103, and 104 and otherwise meet the requirements of title I;
- (2) participation in School-to-Work Opportunities programs by employers, schools, students, and school dropouts, including information on the gender, race, ethnicity, socioeconomic background, limited-English proficiency, and disability of all participants and whether the participants are academically talented students;
- (3) progress in developing and implementing strategies for addressing the needs of students and school dropouts;
- (4) progress in meeting the goals of the State to ensure opportunities for young women to participate in School-to-Work Opportunities programs, including participation in nontraditional employment through such programs;
- (5) outcomes for participating students and school dropouts, by gender, race, ethnicity, socioeconomic background, limited-English proficiency, and disability of the participants, and whether the participants are academically talented students, including information on—
 - (A) academic learning gains;
 - (B) staying in school and attaining—
 - (i) a high school diploma, or a general equivalency diploma, or an alternative diploma or certificate for those students with disabilities for whom such alternative diploma or certificate is appropriate;
 - (ii) a skill certificate; and
 - (iii) a postsecondary degree;
 - (C) attainment of strong experience in and understanding of all aspects of the industry the students are preparing to enter;
 - (D) placement and retention in further education or training, particularly in the career major of the student; and
 - (E) job placement, retention, and earnings, particularly in the career major of the student; and
- (6) the extent to which the program has met the needs of employers.